

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Daniel M. Saban, et al.

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Art Unit: 2834

Serial No.: 09/806,606

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For: ROTORS UTILIZING A  
STEPPED SKEWRECEIVED  
SEP 10 2002  
TECHNOLOGY CENTER 2800

## SUBMISSION OF MARKED UP PARAGRAPHS AND CLAIMS

Hon. Commissioner for Patents  
Washington, D.C. 20231

Submitted herewith are marked up paragraphs and claims in accordance with 37  
C.F.R. Section 1.121(b)(1)(iii) and 1.211(c)(1)(ii).

IN THE SPECIFICATION

Please delete the title and replace with the following title:

ROTOR CORE UTILIZING LAMINATIONS HAVING SLOTS WITH DUAL  
DIRECTION SKEW PORTIONS

Please replace the paragraph on page 4, line 7, with the following replacement  
paragraph.

Figure 4 is a perspective view of the rotor core shown in Figure [4]3;

IN THE CLAIMS

1. (once amended) A rotor comprising a plurality of rotor laminations, each set of  
said laminations having an outer periphery, a first set of rotor laminations comprising a  
plurality of slots having skew portions extending in a first direction, a second set of said rotor  
laminations comprising a plurality of slots having skew portions extending in a second  
direction, and a plurality of notches having an open end at said outer periphery and  
substantially aligned and coextensive with at least one of said skew portions.

8. (once amended) A rotor core in accordance with Claim 1 wherein at least one of  
said notches has a [substantially] rectangular cross sectional shape.

14. (once amended) A rotor for an electric motor, said rotor comprising:

a rotor core comprising a plurality of rotor laminations, each of said laminations having an outer periphery, a first set of rotor laminations comprising a plurality of slots having skew portions extending in a first direction, a second set of said rotor laminations comprising a plurality of slots having skew portions extending in a second direction, a plurality of notches having an open end at said outer periphery and substantially aligned and coextensive with at least one said skew portions, and a central rotor shaft opening;

a rotor shaft having an axis which is coaxial with a rotor core axis of rotation and extending through said central rotor shaft opening;

a plurality of secondary conductors extending through said slots; and

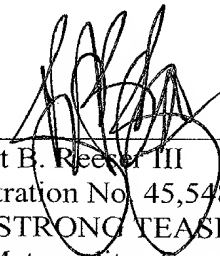
a plurality of permanent magnets located in said lamination notches.

21. (once amended) An electric motor, comprising:

a stator comprising a stator core, first and second main windings, said first main winding configured to form a lower number of poles than said second main winding, said stator core forming a stator bore; and

a rotor core comprising a plurality of rotor laminations, each of said laminations having an outer periphery, a first set of rotor laminations comprising a plurality of slots having skew portions extending in a first direction, a second set of rotor laminations comprising a plurality of slots having skew portions extending in a second direction, a plurality of notches having an open end at said outer periphery and substantially aligned and coextensive with at least one of said skew portions, a plurality of secondary conductors extending through said slots, and a plurality of permanent magnets located in said lamination notches and magnetized to form a number of poles equal to the number of poles formed by said second main winding.

Respectfully Submitted,



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